

**To:** Card, Joan[Card.Joan@epa.gov]  
**Cc:** McKean, Deborah[mckean.deborah@epa.gov]; OBrien, Wendy[OBrien.Wendy@epa.gov]  
**From:** McComb, Martin  
**Sent:** Thur 8/13/2015 2:37:57 PM  
**Subject:** Re: Animas update 8/12

Just waiting on the go ahead from area command to exchange info with partner agencies. We would normally be inputting their data into our field operations but that usually means sharing with them.

Sent from my iPhone

On Aug 13, 2015, at 8:35 AM, Card, Joan <[Card.Joan@epa.gov](mailto:Card.Joan@epa.gov)> wrote:

Wanted you to be aware of USGS sampling if you aren't already. Scroll to the bottom to find it. Thanks. Joan

**From:** Horton, Robert [<mailto:rhorton@usgs.gov>]  
**Sent:** Wednesday, August 12, 2015 4:21 PM  
**To:** Laura Bexfield; Scott Vanderkooi; Allison Shipp; Andrew Todd; Brent Lewis; Breton Bruce; Cory Angerth; David L Fey; David Lytle; David Mau; David Reppert; David Susong; Douglas B Yager; Geoffrey S Plumlee; Heidi K Koontz; Holly Weyers; James M Leenhouts; Jean M Morrison; Card, Joan; JoAnn M Holloway; Katie Walton-Day; Kent Becher; Matt Ely; Michael Lewis; Peter Griffiths; rich wanty; Robert J Hart; Robert Kimbrough; Robert Runkel; Suzanne Paschke; Thomas Chapin; Todd; Trude King  
**Cc:** Max Ethridge  
**Subject:** Animas update 8/12

All, here is an update on the Animas mine spill activities since yesterday. Please note our next Gold King telecon/meeting is scheduled for tomorrow, Thursday (8/13/2015) at 2:00 pm. We will meet in Building 20, Hildenbrand Conference Room (2nd floor - near CGGSC office).

Telephone contact: phone number: 605.475.4000  
Access #: 840456#

Note, if you are on this email list and don't want to be, let me know.

FYI...I sat in on a Gold King mine spill call this morning with a number of HQ staff. Communication was addressed. Apparently there are many complaints from federal, state and tribal agencies that EPA is not forthcoming with information. HQ stressed we need to keep DOI informed on who's doing what. For all involved in the spill, thank you for your updates. Please send any relative information to me and I'll see it is included in our daily brief. HQ can decide if they want to bump it further up the chain.

Thomas Chapin (CGGSC) successfully deployed his mini-sipper samplers (Long-term auto samplers) and is in route back to DFC.

Rob Runkel (CWSC) is in the field collecting sediment samples and deploying samplers/monitors.

Jean Morrison (CGGSC) received a water sample(s) from Farmington public works (CH2M contractor) and is preparing for sample submittal.

UTWSC operates the stream gage on the San Juan at Bluff. They collected a water quality sample there today (8/11) that will be analyzed for total and dissolved metals.

Todd Hoeffen (CGGSC) approached by NASA to fly AVIRIS imaging spectrometer. Hoeffen consulted with CGGSC staff/CD and could not find a strong scientific justification to fly the spill at this time. The AVIRIS sensor is currently configured for low-resolution (8 meter pixel) data collects which would not be sufficient to map features of interest.

A number of Centers have been contacted by tribal officials or raised concerns about USGS tribal engagement regarding the spill. Horton (SWR Tribal Liaison) contacted EPA Region 6 and 8 Tribal Liaison counterparts via email. EPA requests inquiries be routed through Randy Brown, Robert, EPA Tribal Liaison assigned to Unified Command Center @ La Plata County Fairgrounds, Durango Colorado for the Gold King Mine Blowout Site. Email: [brown03.randy@epa.gov](mailto:brown03.randy@epa.gov)

USGS Communications (Heidi Koontz) working on USGS press release (USGS top story) related to spill and USGS activities.

Several requests for interviews reported by different scientists. These requests forwarded to Heidi Koontz for guidance.

Katie Walton-Day (CWSC) chosen to address science inquiries as she has Silverton AML experience.

Discussed with HQ the release of USGS spill related data. Centers should approve the data for QA and do their peer/technical review. Then forward to SWR Director's Office (me) and we will work with OSQI and the BAO to add appropriate disclaimers and inform the Bureau of the pending release.

Horton (SWR) sat in on a National Response Team call, many agencies present. This was the first Gold King spill NRT call, mostly background info presented.

Max Ethridge (SWR) attended a meeting with State geologists in Reno. States have requested assistance.

Received a request the DOI Office of Environmental Protection and Compliance. OEPC is asking for information on what different DOI agencies are sampling. Have asked centers to send me a list of what crews are sampling, what they analyze for and what field data they collect. I suspect the next data call will be "where are they sampling"?

Katie Walton-Day (CWSC) is discussing with other centers, which analytes to analyze for so that all USGS samples will have the same results. Please contact Katie if you are not (and should be) part of the analyte discussion.

Received information from NMWSC on their activities. I am including below two emails from Anne Marie Matherne as they contain numerous details.

----- Forwarded message -----

From: **Matherne, Anne Marie** <[matherne@usgs.gov](mailto:matherne@usgs.gov)>

Date: Wed, Aug 12, 2015 at 2:41 PM

Subject: Fwd: Gold King mine - update of USGS efforts in NM

Hello -

I realized that I inadvertently left you out of the email string when I sent this update out yesterday. My apologies. The recipients are cooperators from the NM Office of the State Engineer, the NM Interstate Stream Commission, NM Environment Dept., and Navajo EPA.

I heard from our current field crew this morning, and they are proceeding as outlined in my note from yesterday. They will be doing the additional sampling at Aztec in conjunction with Steve Monroe of the NPS.

We've had several responses to this email. Tom Skibitski, Emergency Response chief for NMED, said he would stay in contact regarding their plans and results. We had a phone conversation with Mike Johnson, OSE, who expressed an interest in our doing some

groundwater monitoring, although no work was established.

Kevin Flanigan, San Juan River Basin Manager, ISC, was interested in when the results of our samples collected over the weekend will be available. These samples are currently being expedited by NWQL, who expects to have some results available by the end of the week. Laura Bexfield, our QW Specialist, will review these results when they come in and pass them on to you for dissemination.

I had a call from Erik Rich, of the Navajo EPA, just to generally check in.

Stephen Spencer asked whether the NM WSC had been asked to do any post-incident sampling. We sent him a copy of the the work summary enclosed here. As noted, we've not had any official requests.

Finally, I received a call from Lance Richmond, the EPA liaison based in San Francisco, who is the communications coordinator. He asked me to participate on daily incident response calls at 6:00pm. The meeting includes a wide variety of state and federal agencies and is intended as a update on EPAs activities, and to be more of an operational, "who's doing what" type meeting, hoping to increase coordination among the various groups. If anyone else is interested in sitting in on this call, I can pass on the information. The Region 8 Incident rep has also tried to contact Laura Bexfield, but I believe they haven't yet managed to talk with each other.

Also, David Mau just forwarded a request for DOI OPEC asking for information on what DOI agencies are sampling. That information, as well as where the samples are being collected, is included in the note below. If this information isn't sufficient or you need it in another format, please let me know.

Thank you, Anne-Marie

----- Forwarded message -----

From: **Matherne, Anne Marie** <matherne@usgs.gov>  
Date: Tue, Aug 11, 2015 at 3:12 PM  
Subject: Gold King mine - update of USGS efforts in NM

Hello -

We've had a number of inquiries concerning USGS sampling in New Mexico in conjunction with the Gold King mine spill, and we wanted to give you an update of our efforts.

A team of five from the New Mexico Water Science Center arrived at Farmington late on Friday, August 7. The goal was to collect water quality samples in the Animas and San Juan Rivers before and during passage of the spill plume. The team was on-site from Friday night until Sunday afternoon. Sample collection sites coincided with the location of USGS streamgages: Animas River at Farmington (09364500), before and during the plume; San Juan River at Farmington (09365000), during the plume; San Juan River at Shiprock (0936800), before and during the plume; San Juan River at Four Corners (09371010), both samples before the plume. The samples collected on the Animas and the San Juan at Farmington were composite samples; the samples at Shiprock and Four Corners were grab samples. A total of seven samples were collected between Friday night and Sunday afternoon. Samples were filtered and will be tested for major ions, trace metals, and mercury at the USGS National Water Quality Lab. Field parameters (pH, specific conductivity, dissolved oxygen, and water temperature) were collected at the time of sampling. A continuous water-quality sonde was deployed on the Animas River at Farmington on Saturday morning and has continued to record field parameters (pH, SC, DO, and temperature) since that time.

Current efforts, as of Tuesday, August 11, will focus on the Animas at Farmington and San Juan at Farmington sites. A set of two ISCO samplers will be deployed at each site, one to sample daily, and a second, triggered by changes in turbidity, as an event sampler. A discharge measurement will be taken at each location, so that loads can be calculated from the suspended sediment samples.

On August 12, a second, five-parameter (pH, SC, DO, temperature, and turbidity) sonde will be deployed at San Juan at Farmington. Data from the Animas at Farmington sonde, which has been recording since Saturday morning, will be downloaded, and the sonde replaced with a five-parameter unit. A composite water-quality sample will be collected at each site, and bed sediment samples will be collected. An additional set of water quality and

sediment samples may be collected at Aztec in conjunction with National Park Service monitoring there.

The USGS is currently in conversation with various agencies regarding additional monitoring needs, and may adapt our efforts in response to those conversations.

Please let us know if you have any questions.

Thank you, Anne-Marie

CWSC - Colorado Water Science Center

UTWSC - Utah Water Science Center

NMWSC - New Mexico Water Science Center

CGGSC - Crustal Geophysics and Geochemistry Science Center

-Bob

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